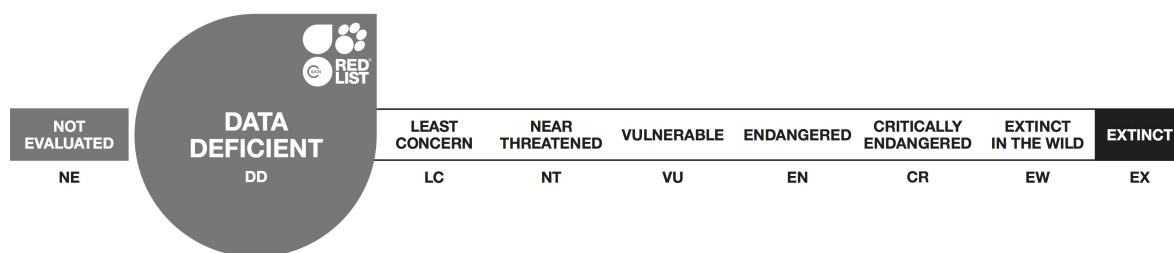


## *Tor tor*, mahseer

**Assessment by: Rayamajhi, A., Jha, B.R., Sharma, C.M., Pinder, A., Harrison, A., Katwate, U. & Dahanukar, N.**



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## Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Actinopterygii	Cypriniformes	Cyprinidae

**Taxon Name:** *Tor tor* (Hamilton, 1822)

### Synonym(s):

- *Barbus megalepis* McClelland, 1839
- *Barbus tor* (Hamilton, 1822)
- *Cyprinus tor* Hamilton, 1822
- *Puntius tor* (Hamilton, 1822)
- *Tor hamiltonii* Gray, 1834

### Common Name(s):

- English: mahseer

### Taxonomic Notes:

Frequently referred to as the 'red-fin' or 'deep bodied' mahseer, *Tor tor* is the type species of the genus *Tor*. Described as *Cyprinus tor* by Francis Hamilton (Hamilton 1822) from the Mahananda River, a tributary of the Ganges in Northeast Bengal, India, this species underwent numerous taxonomic revisions (see Desai 2003) before being classified under the genus *Tor* by Misra (1959).

## Assessment Information

**Red List Category & Criteria:** Data Deficient [ver 3.1](#)

**Year Published:** 2018

**Date Assessed:** August 7, 2018

### Justification:

*Tor tor* is assessed as Data Deficient due to confusion regarding its exact taxonomic identity and distribution. Since its description by Hamilton (1822) from the River Mahananda (northern Bengal), India, all subsequent records of *Tor tor* are from rivers outside Northern Bengal. There has not been any study that has validated the conspecificity of the population from the type locality with those recorded from Central, Northern and Eastern parts of India.

### Previously Published Red List Assessments

2010 – Near Threatened (NT)

<http://dx.doi.org/10.2305/IUCN.UK.2010-4.RLTS.T166534A6231157.en>

## Geographic Range

### Range Description:

*Tor tor* is considered to be the most widely distributed among the mahseers (Lal *et al.* 2013), with a native range extending throughout the South Himalayan drainage from Pakistan in the west to Myanmar

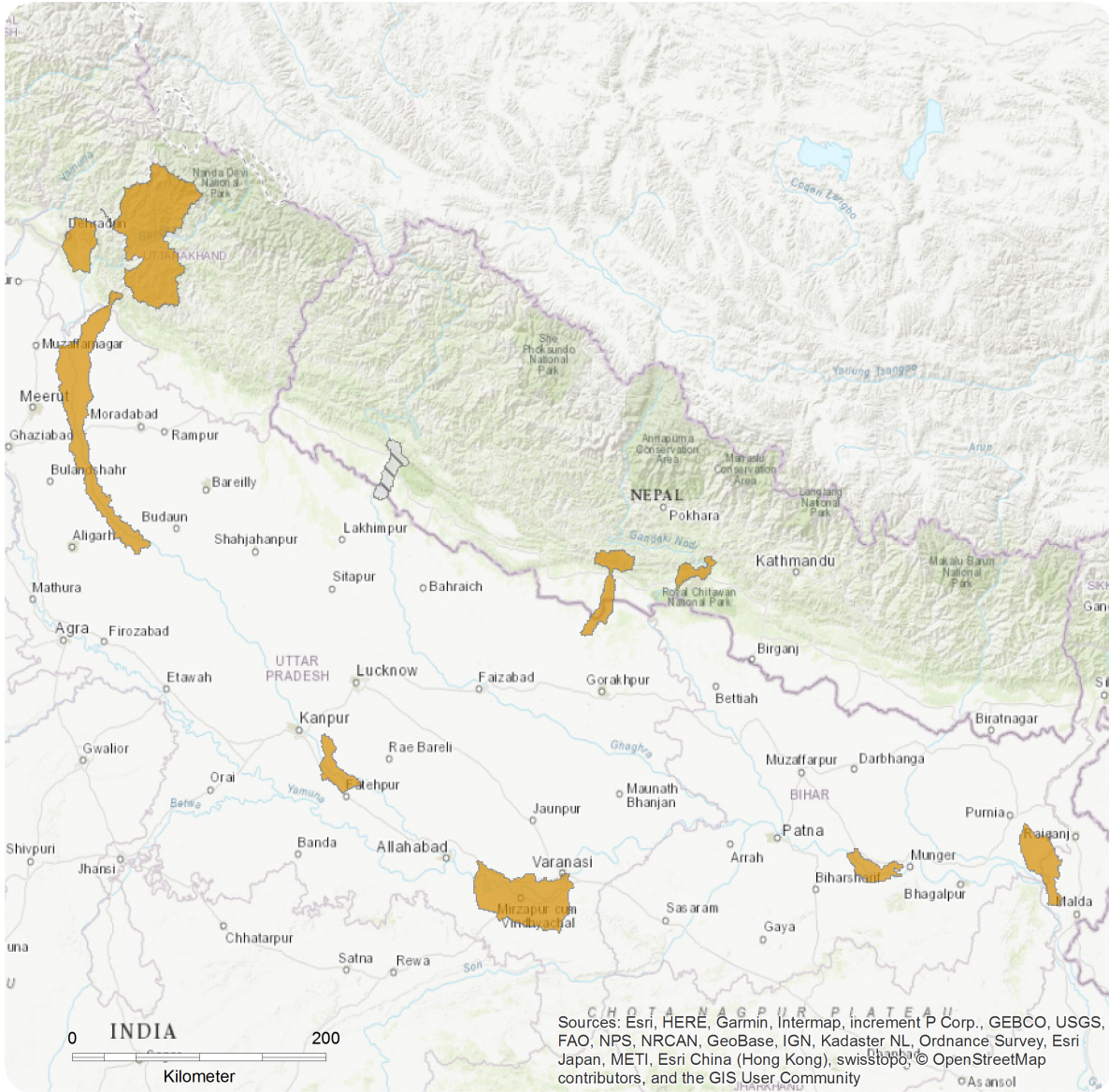
in the East, and southwards to the peninsular Indian rivers. While the westward flowing Narmada River in Madhya Pradesh (Central India) was believed to be the southernmost limit of native distribution, the recent discovery of *T. tor* in the Godavari and Krishna River basins (Lal *et al.* 2013) throws into question whether the species is native to tropical peninsular India, or if range extension has resulted from the introduction and establishment of populations derived from artificially propagated stock. In spite of a large number of studies on the distribution of *T. tor* in Northern, Central and Southern India, it remains to be proved conclusively whether *T. tor* of the Mahananda River (type locality) is conspecific with the populations in Central and peninsular Indian rivers from where they have been subsequently recorded. Nonetheless, if the biogeographic range of *T. tor* presented by Lal *et al.* (2013) is considered accurate, then the apparent wide distribution range of *T. tor* indicates a highly adaptive nature and reveals that the species is naturally eurythermal, inhabiting both cold and warm waters at various altitudes.

**Country Occurrence:**

**Native:** India (Darjiling, West Bengal); Nepal

# Distribution Map

*Tor tor*



## Range

- Extant (resident)
- Probably Extant & Origin Uncertain (seasonality uncertain)

## Compiled by:

IUCN (International Union for Conservation of Nature)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



## Population

Much of the research on the population status of *Tor tor* is based on populations outside the Himalayan range and its type locality in North Bengal (i.e. from the Mahananda). Since it is not known with certainty whether populations that are considered to be '*Tor tor*' in the Northern, Eastern and Central Part of India are conspecific with those from the River Mahananda, existing information on population status and trends cannot be confirmed to be that of *T. tor* (sensu stricto).

**Current Population Trend:** Unknown

## Habitat and Ecology (see Appendix for additional information)

No information is available on the ecology of *Tor tor* from its type locality, in the Mahananda River. The habitat in the Mahananda comprises of fast flowing riffles and pools in a high altitude gradient. Like all mahseer species, *T. tor* is also likely to inhabit small cascades, riffles, deep pools and reservoirs.

**Systems:** Freshwater

## Use and Trade

No specific information is available on this species, given its confusing taxonomy and distribution.

## Threats

Threats to the species are unknown, given its confusing identity and distribution.

## Conservation Actions (see Appendix for additional information)

There is an urgent need to clarify the taxonomy and identity of the species based on specimens collected from its type locality in North Bengal. Without information on the taxonomy and distribution, conservation action plans cannot be developed or implemented.

## Credits

**Assessor(s):** Rayamajhi, A., Jha, B.R., Sharma, C.M., Pinder, A., Harrison, A., Katwate, U. & Dahanukar, N.

**Reviewer(s):** Raghavan, R.

**Contributor(s):** Molur, S.

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## External Resources

For [Images and External Links to Additional Information](#), please see the [Red List website](#).

## Appendix

### Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Habitat	Season	Suitability	Major Importance?
5. Wetlands (inland) -> 5.1. Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	-	Suitable	Yes
5. Wetlands (inland) -> 5.5. Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	-	Suitable	No

### Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Actions in Place
In-Place Research, Monitoring and Planning
Action Recovery plan: No
Systematic monitoring scheme: No
In-Place Land/Water Protection and Management
Conservation sites identified: Yes, over part of range
Occur in at least one PA: Unknown
Area based regional management plan: No
Invasive species control or prevention: No
In-Place Species Management
Harvest management plan: No
Successfully reintroduced or introduced benignly: No
Subject to ex-situ conservation: No
In-Place Education
Subject to recent education and awareness programmes: No
Included in international legislation: No
Subject to any international management/trade controls: No

### Conservation Actions Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

<b>Conservation Actions Needed</b>
1. Land/water protection -> 1.1. Site/area protection
1. Land/water protection -> 1.2. Resource & habitat protection
2. Land/water management -> 2.1. Site/area management
3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
4. Education & awareness -> 4.1. Formal education
4. Education & awareness -> 4.2. Training
4. Education & awareness -> 4.3. Awareness & communications

## Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

<b>Research Needed</b>
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.3. Life history & ecology
1. Research -> 1.5. Threats
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.2. Harvest level trends

## Additional Data Fields

<b>Distribution</b>
Lower elevation limit (m): 135
Upper elevation limit (m): 1891
<b>Population</b>
Continuing decline of mature individuals: Unknown
Population severely fragmented: Unknown
<b>Habitats and Ecology</b>
Movement patterns: Altitudinal Migrant



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